

**In the Specification:**

Please amend the specification as shown:

Please delete the sequence on page 48, lines 7-11, and replace it with the following sequence:

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                5      10      15      20      25      30      35
32A KD      FSRPG  LPVEY  LQVPS  PSMGR  DIKVQ  FQSGG  ANSPA
                40
                LYLLD

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(Sequence ID No. 28)

Please delete the sequence on pages 49 and 50, and replace it with the following sequence:

**30 KD DNA SEQUENCE**

(Nucleotide sequence and encoded protein are SEQ ID NOS 35 and 161, respectively)

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1/1                                31/11
ATG ACA GAC GTG AGC CGA AAG ATT CGA GCT TGG GGA CGC CGA
met thr asp val ser arg lys ile arg ala trp gly arg arg
                                61/21
TTG ATG ATC GGC ACG GCA GCG GCT GTA GTC CTT CCG GGC CTG
leu met ile gly thr ala ala ala val val leu pro gly leu
                                91/31
GTG GGG CTT GCC GGC GGA GCG GCA ACC GCG GGC GCG
val gly leu ala gly gly ala ala thr ala gly ala
121/41                                151/51
TTC TCC CGG CCG GGG CTG CCG GTC GAG TAC CTG CAG GTG CCG
phe ser arg pro gly leu pro val glu tyr leu gln val pro
                                181/61
TCG CCG TCG ATG GGC CGC GAC ATC AAG GTT CAG TTC CAG AGC
ser pro ser met gly arg asp ile lys val gln phe gln ser
211/71                                241/81
GGT GGG AAC AAC TCA CCT GCG GTT TAT CTG CTC GAC GGC CTG
gly gly asn asn ser pro ala val tyr leu leu asp gly leu
                                271/91
CGC GCC CAA GAC GAC TAC AAC GGC TGG GAT ATC AAC ACC CCG
arg ala gln asp asp tyr asn gly trp asp ile asn thr pro
                                301/101

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GCG TTC GAG TGG TAC TAC CAG TCG GGA CTG TCG ATA GTC ATG  
 ala phe glu trp tyr tyr gln ser gly leu ser ile val met  
 331/111 361/121  
 CCG GTC GGC GGG CAG TCC AGC TTC TAC AGC GAC TGG TAC AGC  
 pro val gly gly gln ser ser phe tyr ser asp trp tyr ser  
 391/131  
 CCG GCC TGC GGT AAG GCT GGC TGC CAG ACT TAC AAG TGG GAA  
 pro ala cys gly lys ala gly cys gln thr tyr lys trp glu  
 421/141 451/151  
 ACC TTC CTG ACC AGC GAG CTG CCG CAA TGG TTG TCC GCC AAC  
 thr phe leu thr ser glu leu pro gln trp leu ser ala asn  
 481/161  
 AGG GCC GTG AAG CCC ACC GGC AGC GCT GCA ATC GGC TTG TCG  
 arg ala val lys pro thr gly ser ala ala ile gly leu ser  
 511/171  
 ATG GCC GGC TCG TCG GCA ATG ATC TTG GCC GCC TAC CAC CCC  
 met ala gly ser ser ala met ile leu ala ala tyr his pro  
 541/181 571/191  
 CAG CAG TTC ATC TAC GCC GGC TCG CTG TCG GCC CTG CTG GAC  
 gln gln phe ile tyr ala gly ser leu ser ala leu leu asp  
 601/201  
 CCC TCT CAG GGG ATG GGG CCT AGC CTG ATC GGC CTC GCG ATG  
 pro ser gln gly met gly pro ser leu ile gly leu ala met  
 631/211 661/221  
 GGT GAC GCC GGC GGT TAC AAG GCC GCA GAC ATG TGG GGT CCC  
 gly asp ala gly gly tyr lys ala ala asp met trp gly pro  
 691/231  
 TCG AGT GAC CCG GCA TGG GAG CGC AAC GAC CCT ACG CAG CAG  
 ser ser asp pro ala trp glu arg asn asp pro thr gln gln  
 721/241  
 ATC CCC AAG CTG GTC GCA AAC AAC ACC CGG CTA TGG GTT TAT  
 ile pro lys leu val ala asn asn thr arg leu trp val tyr  
 751/251 781/261  
 TGC GGG AAC GGC ACC CCG AAC GAG TTG GGC GGT GCC AAC ATA  
 cys gly asn gly thr pro asn glu leu gly gly ala asn ile  
 811/271  
 CCC GCC GAG TTC TTG GAG AAC TTC GTT CGT AGC AGC AAC CTG  
 pro ala glu phe leu glu asn phe val arg ser ser asn leu  
 841/281 871/291  
 AAG TTC CAG GAT GCG TAC AAC GCC GCG GGC GGC CAC AAC GCC  
 lys phe gln asp ala tyr asn ala ala gly gly his asn ala  
 901/301  
 GTG TTC AAC TTC CCG CCC AAC GGC ACG CAC AGC TGG GAG TAC  
 val phe asn phe pro pro asn gly thr his ser trp glu tyr  
 931/311  
 TGG GGC GCT CAG CTC AAC GCC ATG AAG GGT GAC CTG CAG AGT  
 trp gly ala gln leu asn ala met lys gly asp leu gln ser  
 961/321  
 TCG TTA GGC GCC GGC TGA  
 ser leu gly ala gly OPA (Sequence ID No. 35)

Please delete the sequence on pages 50 to 53, and replace it with the following sequence:

**32 KD DNA SEQUENCE**

**(Nucleotide sequence and encoded protein are SEQ ID NOS 36 and 162, respectively)**

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1/1                                     31/11
ATG CAG CTT GTT GAC AGG GTT CGT GGC GCC GTC ACG GGT ATG
met gln leu val asp arg val arg gly ala val thr gly met
                                     61/21
TCG CGT CGA CTC CTC CTC CCG CCC CTC CCC CCC GCG CTA CTC
TCG CGT CGA CTC GTG GTC GGG GCC GTC GGC GCG GCC CTA GTG
ser arg arg leu val val gly ala val gly ala ala leu val
                                     91/31                                     121/41
TCG GGT CTG GTC GGC GCC GTC GGT GGC ACG GCG ACC GCG GGG
ser gly leu val gly ala val gly gly thr ala thr ala gly
                                     151/51
GCA TTT TCC CGG CCG GGC TTG CCG GTG GAG TAC CTG CAG GTG
ala phe ser arg pro gly leu pro val glu tyr leu gln val
                                     181/61
CCG TCG CCG TCG ATG GGC CGT GAC ATC AAG GTC CAA TTC CAA
pro ser pro ser met gly arg asp ile lys val gln phe gln
211/71                                     241/81
AGT GGT GGT GCC AAC TCG CCC GCC CTG TAC CTG CTC GAC GGC
ser gly gly ala asn ser pro ala leu tyr leu leu asp gly
                                     271/91
CTG CGC GCG CAG GAC GAC TTC AGC GGC TGG GAC ATC AAC ACC
leu arg ala gln asp asp phe ser gly trp asp ile asn thr
301/101                                     331/111
CCG GCG TTC GAG TGG TAC GAC CAG TCG GGC CTG TCG GTG GTC
pro ala phe glu trp tyr asp gln ser gly leu ser val val
361/121
ATG CCG GTG GGT GGC CAG TCA AGC TTC TAC TCC GAC TGG TAC
met pro val gly gly gln ser ser phe tyr ser asp trp tyr
391/131
CAG CCC GCC TGC GGC AAG GCC GGT TGC CAG ACT TAC AAG TGG
gln pro ala cys gly lys ala gly cys gln thr tyr lys trp
421/141                                     451/151
GAG ACC TTC CTC ACC ACC CAC CTC CCC GGG TGG CTC CAC CCC
GAG ACC TTC CTG ACC AGC GAG CTG CCG GGG TGG CTG CAG GCC
glu thr phe leu thr ser glu leu pro gly trp leu gln ala
481/161
AAC AGG CAC GTC AAG CCC ACC GGA AGC GCC GTC GTC GGT CTT
asn arg his val lys pro thr gly ser ala val val gly leu
511/171                                     541/181
TCG ATG GCT GCT TCT TCG GCG CTG ACG CTG GCG ATC TAT CAC
ser met ala ala ser ser ala leu thr leu ala ile tyr his
571/191
CCC CAG CAG TTC GTC TAC GCG GGA GCG ATG TCG GGC CTG TTG
pro gln gln phe val tyr ala gly ala met ser gly leu leu
601/201
GAC CCC TCC CAG GCG ATG GGT CCC ACC CTG ATC GGC CTG GCG
asp pro ser gln ala met gly pro thr leu ile gly leu ala
631/211                                     661/221

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ATG GGT GAC GCT GGC GGC TAC AAG GCC TCC GAC ATG TGG GGC  
met gly asp ala gly gly tyr lys ala ser asp met trp gly  
691/231  
CCG AAG GAG GAC CCG GCG TGG CAG CGC AAC GAC CCG CTG TTG  
pro lys glu asp pro ala trp gln arg asn asp pro leu leu  
721/241 751/251  
AAC GTC GGG AAG CTG ATC GCC AAC AAC ACC CGC GTC TGG GTG  
asn val gly lys leu ile ala asn asn thr arg val trp val  
781/261  
TAC TGC GGC AAC GGC AAG CCG TCG GAT CTG GGT GGC AAC AAC  
tyr cys gly asn gly lys pro ser asp leu gly gly asn asn  
811/271  
CTG CCG GCC AAG TTC CTC GAG GGC TTC GTG CGG ACC AGC AAC  
leu pro ala lys phe leu glu gly phe val arg thr ser asn  
841/281 871/291  
ATC AAG TTC CAA GAC GCC TAC AAC GCC GGT GGC GGC CAC AAC  
ile lys phe gln asp ala tyr asn ala gly gly gly his asn  
901/301  
GGC GTG TTC GAC TTC CCG GAC AGC GGT ACG CAC AGC TGG GAG  
gly val phe asp phe pro asp ser gly thr his ser trp glu  
931/311 961/321  
TAC TGG GGC GCG CAG CTC AAC GCT ATG AAG CCC GAC CTG CAA  
tyr trp gly ala gln leu asn ala met lys pro asp leu gln  
991/331  
CGG GCA CTG GGT GCC ACG CCC AAC ACC GGG CCC GCG CCC CAG  
arg ala leu gly ala thr pro asn thr gly pro ala pro gln

GGC GCC TAG  
gly ala AMB

(Sequence ID No. 36)

Please delete the header on page 52, line 12, and replace it with the following header:

**16 KD DNA SEQUENCE**

**(Nucleotide and encoded protein are SEQ ID NOS 92 and 163,  
respectively)**

Please delete the header on page 52, line 38, and replace it with the following header:

**58 KD DNA SEQUENCE**

**(Nucleotide and encoded protein are SEQ ID NOS 93 and 164,  
respectively)**

Please delete the sequence on page 54, lines 1-38, and replace it with the following sequence:

**23.5 KD DNA SEQUENCE**

(Nucleotide and encoded protein are SEQ ID NOS 94 and 165, respectively)

1/1	GTG CGC ATC AAG ATC TTC ATG CTG GTC ACG	31/11	GCT GTC GTT TTG CTC TGT TGT TCG G <del>SG</del> T GTG
	val arg ile lys ile phe met leu val thr		ala val val leu leu cys cys ser gly val
61/21	GCC ACG GCC GCG CCC AAG ACC TAC TGC GAG	91/31	GAG TTG AAA GGC ACC GAT ACC GGC CAG GCG
	ala thr ala ala pro lys thr tyr cys glu		glu leu lys gly thr asp thr gly gln ala
121/41	TGC CAG ATT CAA ATG TCC GAC CCG GCC TAC	151/51	AAC ATC AAC ATC AGC CTG CCC AGT TAC TAC
	cys gln ile gln met ser asp pro ala tyr		asn ile asn ile ser leu pro ser tyr tyr
181/61	CCC GAC CAG AAG TCG CTG GAA AAT TAC ATC	211/71	GCC CAG ACG CGC GAC AAG TTC CTC AGC GCG
	pro asp gln lys ser leu glu asn tyr ile		ala gln thr arg asp lys phe leu ser ala
241/81	GCC ACA TCG TCC ACT CCA CGC GAA GCC CCC	271/91	TAC GAA TTG AAT ATC ACC TCG GCC ACA TAC
	ala thr ser ser thr pro arg glu ala pro		tyr glu leu asn ile thr ser ala thr tyr
301/101	CAG TCC GCG ATA CCG CCG CGT GGT ACG CAG	331/111	GCC GTG GTG CTC AAG GTC TAC CAG AAC GCC
	gln ser ala ile pro pro arg gly thr gln		ala val val leu lys val tyr gln asn ala
361/121	GGC GGC ACG CAC CCA ACG ACC ACG TAC AAG	391/131	GCC TTC GAT TGG GAC CAG GCC TAT CGC AAG
	gly gly thr his pro thr thr thr tyr lys		ala phe asp trp asp gln ala tyr arg lys
421/141	CCA ATC ACC TAT GAC ACG CTG TGG CAG GCT	451/151	GAC ACC GAT CCG CTG CCA GTC GTC TTC CCC
	pro ile thr tyr asp thr leu trp gln ala		asp thr asp pro leu pro val val phe pro
481/161	ATT GTG CAA GGT GAA CTG AGC AAG CAG ACC	511/171	GGA CAA CAG GTA TCG ATA GCG CCG AAT GCC
	ile val gln gly glu leu ser lys gln thr		gly gln gln val ser ile ala pro asn ala
541/181	GGC TTG GAC CCG GTG AAT TAT CAG AAC TTC	571/191	GCA GTC ACG AAC GAC GGG GTG ATT TTC TTC
	gly leu asp pro val asn tyr gln asn phe		ala val thr asn asp gly val ile phe phe
601/201	TTC AAC CCG GGG GAG TTG CTG CCC GAA GCA	631/211	GCC GGC CCA ACC CAG GTA TTG GTC CCA CGT
	phe asn pro gly glu leu leu pro glu ala		ala gly pro thr gln val leu val pro arg
661/221	TCC GCG ATC GAC TCG ATG CTG GCC TAG		
	ser ala ile asp ser met leu ala AMB		

(Sequence ID No. 94)

Please delete the header on page 54, line 39, and replace it with the following header:

24 KD DNA SEQUENCE  
(Nucleotide and encoded protein are SEQ ID NOS 95 and 166,  
respectively)

Please delete the paragraph on page 111, lines 11-16, and replace it with the following paragraph:

An N-terminal amino acid analysis of recombinant *Mycobacterium tuberculosis* 32A KD protein expressed and secreted by *Mycobacterium smegmatis* at 28°C gives the following sequence:

1                      6  
F S R P G L P (SEQ ID NO: 167)